



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

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**January 14, 2011**

## **NOTICE OF DECISION**

**PERMIT NUMBER NEV96015**

**NV ENERGY**

### **NORTH VALMY GENERATING STATION**

The Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control (BWPC) has decided to issue (renew) for a five-year duration the State of Nevada (NEV) Discharge Permit NEV96015. This permit authorizes operation of six lined evaporation ponds for the evaporative storage of wastewater discharged from an electrical generating station. The permitted facility is operated by NV Energy at the North Valmy Generating Station located approximately six miles NW of the I-80 Valmy Interchange in Humboldt County Nevada. Sufficient information has been provided, in accordance with Nevada Administrative Code (NAC) 445A.228 through NAC 445A.263, to assure the BWPC that the waters of the State will not be degraded from this operation and that public safety and health will be protected.

This permit will become effective **February 1, 2011**. The final determination may be appealed to the State Environmental Commission (SEC) pursuant to Nevada Revised Statutes (NRS) 445A.605. The appeal must be requested within ten (10) days of the date of this notice of decision and in accordance with the administrative rules of the Commission (SEC).

## RESPONSE TO PUBLIC COMMENTS

### John Barth – Comment Letter (6/7/10)

1.1

Comment: *NDEP should require that NV Energy completely eliminate its wastewater discharge by constructing and operating a zero discharge treatment system that would recycle all water used at the facility.*

Response: The six lined evaporation ponds at Valmy are operated with a designed zero-discharge to the groundwater. There are no infiltration basins associated with the ponds. For dust control, this facility is permitted to apply cooling water and pond effluent from Ponds D-F. BWPC does not have the regulatory authority to require operation of a 100% water recycle system at this facility in place of evaporation ponds. Upon review of the facility's permit renewal application, BWPC has determined that the proposed permit conditions are adequately protective of human health and the environment.

### Vinny Spotleson – Public Hearing (9/9/10)

2.1

Comment: *We would like to require NV Energy to install zero discharge treatment systems.*

Response: See response to comment 1.1.

### John Barth – Comment Letter (6/7/10)

3.1

Comment: *The new permit would allow flow of 1.5 mgd. Sierra Club requests that NDEP deny NV Energy's request to triple the flow into the Ponds. Instead, the renewal permit should establish a compliance schedule to require the facility to meet its existing .576 mgd flow limitation.*

Response: BWPC has reviewed the facility's permit application and determined that the facility has provided sufficient data to indicate that there is sufficient capacity in the ponds to maintain the proposed flow limits without discharge to the groundwater. The permit has in-place monitoring requirements such as minimum freeboard level to ensure that overtopping of the ponds will not occur during normal operation.

**Vinny Spotleson – Public Hearing (9/9/10)**

4.1

Comment: *We would like to deny the requested increase.*

Response: See response to comment 3.1.

**John Barth – Comment Letter (6/7/10)**

5.1

Comment: *Valmy has also violated its pH limit in Pond 3 in the first quarter of 2009 (reported pH value of 10.58). NDEP should bring an enforcement action for this violation and require that NV Energy take corrective measures to ensure continuous compliance with all pH effluent limits in the future.*

Response: With respect to effluent and pond pH levels, the Permittee remains in substantial compliance with its permit conditions. In the past seven years, two separate pH violations have been reported that occurred approximately four years apart from each other. Because the pH violations were exceptions, were immediately mitigated and had no negative environmental impact due to the lined status of the ponds, neither pH violation rose to the level of an enforcement action. The pH violations have been recorded and remain part of the facility's compliance history.

**Vinny Spotleson – Public Hearing (9/9/10)**

6.1

Comment: *Valmy has also violated its pH limit in Pond 3 in the first quarter of 2009 with a reported pH value of 10.58. NDEP should bring an enforcement action for the violation and require that NV Energy take corrective measures to ensure continuous compliance with all pH effluent limits in the future.*

Response: See response to comment 5.1.

**John Barth – Comment Letter (6/7/10)**

7.1

Comment: *The proposed permit violates the anti-backsliding provisions of the CWA because it appears to eliminate a current permit for pH limits of 6.0 s.u. to 10.0 s.u. Sierra Club requests that NDEP maintain a pH limit and tighten the limitations to 6.5 s.u. to 8.5 s.u., which would be more protective of groundwater resources and more consistent NDEP Profile 1 and with ELGs.*

Response: Discharge permit NEV96015 is a state-issued (NEV) permit and not subject to federal Clean Water Act (CWA) provisions. This facility does not discharge to surface waters and is therefore not in the NPDES (NV) permit program. NDEP is

renewing discharge permit NEV96015 with a wastewater pH limitation of 6.0 to 10.0 S.U.

**Vinny Spotleson – Public Hearing (9/9/10)**

8.1

Comment: *The proposed permit violates the anti-backsliding provisions of the Clean Water Act because it appears to eliminate a current permit for the pH limits of 6.0 s.u. to 10.0 s.u. The Sierra Club requests that NDEP maintain a pH limit and tighten limitations to 6.5 s.u. to 8.5 s.u., which would be more protective of groundwater resources and more consistent NDEP Profile 1 and with ELGs.*

Response: See response to comment 7.1.

**John Barth – Comment Letter (6/7/10)**

9.1

Comment: *Sierra Club requests that the renewal permit require NV Energy to conduct extensive groundwater sampling to characterize the water for all MCL compliance and then establish effluent limits that will comply with Nevada's nondegradation policy.*

Response: The existing terms of discharge permit NEV96015 require groundwater reporting from three monitoring wells. For the permit renewal, NV Energy has agreed to report groundwater data from four monitoring wells including the inorganic constituents in NDEP Profile 1. The evaporation ponds do not discharge into an infiltration basin.

**Vinny Spotleson – Public Hearing (9/9/10)**

10.1

Comment: *Sierra Club requests that the renewal permit require NV Energy to conduct extensive groundwater sampling to characterize the water for all MCL compliance, and then establish effluent limits that will comply with Nevada's nondegradation policy.*

Response: See response to comment 9.1.

**John Barth – Comment Letter (6/7/10)**

11.1

Comment: *NDEP should impose monitoring requirements and effluent limits at least as stringent as effluent limitation guidelines ("ELGs") for existing electric steam generating units.*

Response: Federal effluent limitation guidelines (ELGs) are not applicable to this facility as it is regulated by BWPC under a state-issued (NEV) permit. See also the previous response to comment 7.1.

**Vinny Spotleson – Public Hearing (9/9/10)**

12.1

Comment: *NDEP should impose monitoring requirements and effluent limits at least as stringent as effluent limitation guidelines, ELGs, for existing electric steam-generating units.*

Response: See response to comment 11.1.

**John Barth – Comment Letter (6/7/10)**

13.1

Comment: *Sierra Club requests that NDEP require NV Energy to install additional upgradient and downgradient groundwater monitoring wells.*

Response: For the permit renewal, NV Energy will be reporting data from three down-gradient and one up-gradient monitoring wells. Three of these four wells are new construction to replace the two inactive (dry) wells MW-1 and MW-2. The number of monitoring wells meets BWPC requirements.

**Vinny Spotleson – Public Hearing (9/9/10)**

14.1

Comment: *Sierra Club requests that NDEP require NV Energy to install additional upgradient and downgradient groundwater monitoring wells.*

Response: See response to comment 13.1.

**John Barth – Comment Letter (6/7/10)**

15.1

Comment: *NV Energy should be required to study whether there is any connection between the groundwater on the facility and the Humboldt River.*

Response: The ponds are not designed for discharges of wastewater to the Humboldt River and are designed for zero discharges to the groundwater. The facility ponds are located 3½ miles east of the Humboldt River and are operated without an infiltration basin. BWPC has determined that the proposed permit conditions are adequately protective of human health and the environment.

**Vinny Spotleson – Public Hearing (9/9/10)**

16.1

Comment: *NV Energy should be required to study whether or not there is any connection between the groundwater on the facility and the Humboldt River.*

Response: See response to comment 15.1.

**John Barth – Comment Letter (6/7/10)**

17.1

Comment: *NDEP needs to impose more effluent limits for this discharge, including limits on the many heavy metals present in coal ash.*

Response: The waste fly ash from the Valmy facility's air pollution control system is disposed into a lined landfill system separately permitted by the Division's Bureau of Waste Management. With respect to additional effluent limitations, BWPC has determined that the proposed permit conditions are adequately protective of human health and the environment.

**Vinny Spotleson – Public Hearing (9/9/10)**

18.1

Comment: *NDEP needs to impose more effluent limits for this discharge, including limits on the many heavy metals present in coal ash.*

Response: See response to comment 17.1.

**John Barth – Comment Letter (6/7/10)**

19.1

Comment: *The proposed permit should take climate change into account.*

Response: The mission of the BWPC is to protect the waters of the State from the discharge of pollutants. Regulation of climate change is beyond the authority of BWPC.

**Vinny Spotleson – Public Hearing (9/9/10)**

20.1

Comment: *We think the proposed permit should take climate change into account where possible.*

Response: See response to comment 19.1.